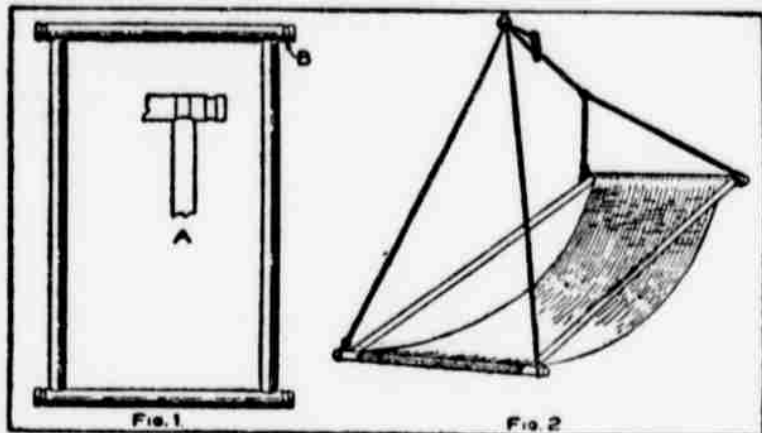


INDUSTRY AND MECHANICS

A PORCH SWING CHAIR.

Easy to Make and Great Addition to the Porch.

The material needed for making this porch swing chair are two pieces of round wood 2 1/2 inches in diameter and 20 inches long, and two pieces 1 1/2 inches in diameter and 40 inches long. These longer pieces can be made square, but for appearance it is best to have them round or square



with the corners rounded. A piece of canvas, or other stout cloth, 18 inches wide and 50 inches long, is to be used for the seat. The two short pieces of wood are used for the ends of the chair and two one-inch holes are bored

in each end of them 1 1/2 inches from the ends, and between the holes and the ends grooves are cut around them to make a place to fasten ropes, as shown at B, Fig. 1. The two longer pieces are used for the sides and a tenon is cut on each end of them to fit in the one-inch holes bored in the end pieces, as shown at A, Fig. 1. The canvas is now tacked on the end pieces and the pieces given one turn before placing the mortising together.

The chair is now hung up to the porch ceiling with ropes attached to a large screw eye or hook. The end of the chair to be used for the lower part is held about 16 inches from the floor with ropes direct from the grooves in the end pieces to the hook. The upper end is supported by using a rope in the form of a loop or ball, as shown in Fig. 2. The middle of the loop or ball

A MIXED DIET.

Eating Fads Are as Bad as Reckless Intemperance.

Dr. Armand Gauthier of the French academy is a rational scientist who comes forward with the theory that fads in diet are as bad as reckless intemperance. He contends that the only safe ground is the compromising, middle platform that since meat has always been a natural food of man, man may eat it, yet as God has seen fit to grow for us certain succulent plants, we may partake of them, too. He contends that no formal rule of vegetarianism is a safe one, but instead of a vehement harangue on the subject, is content to say in easy-going fashion, that "vegetarianism, mitigated by the use of milk and eggs, is a rational diet which, in many cases, is of the utmost value."

He contends that the consumption of alcohol increases as the use of meat decreases, but further says tolerantly, "If vegetables best agree with a man and he doesn't care for meat, he should eat them, and take the chances of a growing desire for alcohol."

His objections to a strictly vegetarian diet are based less on approval of meat than on a belief that a mixed diet is the only proper one. And this, after all, is only another way of saying, "Be moderate, sane and sensible, and take the goods the gods provide."

CHESS CAKES.

"Happy Housekeeper" Lets Her Sisters Into Her Secret.

I wonder if all the sisters make and enjoy chess cakes as much as we do, writes a "Happy Housekeeper." I will send my recipe and hope some will like it. When I make pies I make pastry enough for my shells, and roll thin as for pie crust and cut with a one-pound coffee can 12 rounds and line muffin tins, just as you would a pie-plate; then make a filling as follows: One cup raisins chopped fine, one cup hot water, one cup sugar, butter the size of a walnut, one table spoon of flour, yolks of two eggs. Mix flour with sugar, then yolks of eggs, then add water, butter and raisins and let just come to a boil, then add juice and rind of one lemon; fill the shells and bake. Beat the white of two eggs till stiff, then add two heaping teaspoons of sugar, spread on the top of each cake and return to the oven to brown.

These are fine. Another filling is made of coconut—One cup coconut, one cup sugar, one cup hot water, butter the size of a walnut, yolks of two eggs. Just mix and fill shells, then bake and frost the same as for the raisin filling.

Salt in Cooking.

If one portion of a vegetable is cooked in pure water, the other half in salted water, a decided difference is perceptible in the tenderness of the two. Those boiled in pure water are vastly inferior and in many cases will be almost tasteless. Salt brings out the delicate flavor of cauliflower, cabbage, potatoes, peas, beans and practically all vegetables. Onions cooked in water without salt can be rendered almost tasteless. As salt increases the temperature of boiling water above the average temperature of pure boiling water its cooking advantage is at once apparent. Salt in cold water is used to drive insects from vegetables growing above ground. They instantly release themselves from the leaves when they are plunged in salty water and can be rinsed off. Celery is improved by standing it in slightly salted water for one-half hour before it is served.

To Cook Young Chickens.

Dress and joint them as usual and place them in a dripping pan and just cover with sweet cream. Season with a little salt, pepper and a little butter, and then put in oven to cook. By the time the cream is almost cooked away the chicken will be done.

To Clean Grease Pan.

To many housekeepers the work of cleaning the pan under the broiler of a gas range is a distinct horror. Here is an easy way: Keep on hand a little paper bag of cornmeal. When ready to clean the pan sprinkle upon it enough cornmeal to absorb the grease. Then take a broad scraper—a cake turner is the best—and scrape off the corn meal. The grease comes with it and leaves the pan clean and ready to be washed easily with hot water.

Greasy dishes may be treated in the same way.

Combination Salad.

One small, firm head of white cabbage, shredded very fine, four medium sized tart apples cut in small squares, six cold potatoes cut the same, one small cup of English walnuts broken in small pieces, one teaspoonful of chopped white onion, two stalks of celery and a pinch of cayenne pepper. Mix with two silver forks (steel will turn the apple black), pour over a generous quantity of mayonnaise dressing. Place on lettuce leaves and set on ice one hour before serving.—Boston Post.

Origin of Pitchblende.

Hon. R. J. Strutt, in a recent lecture on radio-active change in the earth, remarked that in England pitchblende, the source of radium, is found only in Cornwall, in veins in granite and slate. To the question: "How did it get there?" he proposed the answer that it was derived from the surrounding granite, which examination showed to contain radium to the amount of one part in a million million. At this rate, minute as it appeared, the total quantity of radium in the crust of the earth to a depth of 40 or 50 miles was more than sufficient to account for the internal heat of the earth.

It Reminded Him.

"My boy," said Popley, "it should be your ambition to carve your name some day upon the temple of fame." "My boy," said Popley, "it should be mine, you ain't never give me that jack knife you promised me."

A Busy Waterway.

One-seventh of the foreign commerce of Great Britain passes through the Suez canal.

Good Jokes

TRUE TO LIFE.

"Thanks," said the tragedian, "many thanks for your good opinion. I always study from Nature—from Nature, sir. In my acting you see reflected Nature herself."

"Try this cigar," said an admirer of Nature reverently. "Now, where did you study that expression of intense surprise that you assume in the second act?"

"From Nature, sir—from Nature. To secure that expression, I asked an intimate friend to lend me five pounds. He refused. This caused me no surprise. I tried several more. Finally I asked one who was willing to oblige me, and as he handed me the note I studied in a glass the expression of my own face. I saw there surprise, but it was not what I wanted. It was alloyed with suspicion that the note might be a bad one. I was in despair."

"Well," said the other breathlessly. "Then an idea struck me. I resolved upon a desperate course. I returned the five pounds to my friend the next day and on his astounded countenance I saw the expression I was in search of."—Royal Magazine.

Exchanging Courtesies.

Barber—Your head is sadly in need of a shampoo, sir.

Tailor (in the chair)—Yes, and your clothes are decidedly seedy, but I don't nag you about it.—Royal Magazine.

DEEP SEA GOSSIP.



First Mermaid—What was the excitement about at the bottom awhile ago?

Second Mermaid—Why, haven't you heard? The swordfish and the sawfish fought a duel over the hand of Miss Octopus, and now they'll have to send for a scissors grinder to fix them up.

Alas!

Full many a flower is born to blush unseen, and waste its sweetness on the desert air; Full many a golfer gets upon the green in three strokes, and takes five to hole out there.—Chicago Record-Herald.

Most Economical.

House-Hunter—I thought you said this house was a perfect gem? Agent—Indeed it is, madam. "Why, the ceilings are very low." "That's so; they'll be easy to keep clean." "And the windows are dreadfully small." "To keep the sun from fading the carpets."

"And there is no bathroom." "That's to save soap, madam."—Royal Magazine.

FIDO FIRST.



Hubby—Pray do not misunderstand me, Jeannette, all I ask is that you should kiss me before and not after you have kissed the dog.

Wife—But Leopold, don't you think that the dog may have his preference, too?

Judging by Looks.

Church—She says she is only 28. Do you think she looks it?

Gotham—Why, yes; I think she looks like the kind of a woman who would say she was only 28.—Yonkers Statesman.

THE FLIGHT.

"Come fly with me!" the young man said. "Not to the crude old-fashioned way. My aeroplane waits overhead. And frets the bonds that bid it stay. 'Tis but a pleasure hunt I ask. You'll try with me. This is no life-long journey's task—Come! Fly with me!"

"The fervid phrase of other days Has given way to simple facts; No more poetic fancy plays—Our speech is simple and exact. I don't request you'll live life through And die with me. I merely am inviting you To fly with me!"—Washington Star.

A POOR ACTOR.



"You don't act like a blind man." "Doing my best, sir; but when such chaps as you come along, it's hard to pretend not to see them."—Philadelphia Ledger.

Never Gets Less.

All military fashions change Each season more than twice. The only constant thing at all About them is the price.—Detroit Free Press.

When Greek Met Greek.

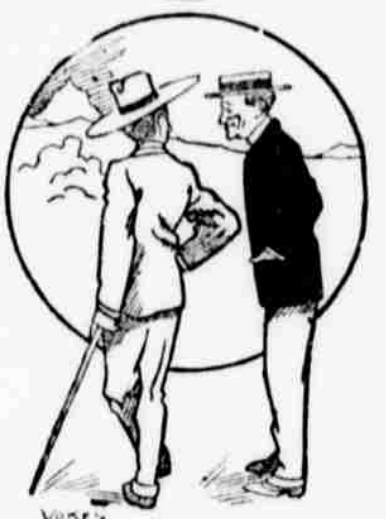
Elipson—Young Waggoner has got the laugh turned against him in his little joke against the Blazes Fire Insurance company.

Elipson—How? Elipson—He insured 500 cigars, smoked them, and then sent in a claim, on the ground that they had been destroyed by fire.

Elipson—And they laughed at him, I suppose?

Elipson—No. They had him arrested on a charge of arson.—Royal Magazine.

A DESPERATE CHANCE.



First City Boarder—Let's climb that mountain this morning.

Second City Boarder—Great Scott, man, would you take such chances?

First City Boarder—What do you mean?

Second City Boarder—Why, we might not get back in time for dinner, and they're going to have three kinds of pie today.

The Saucy Seesaw.

A girl made her court named "Chancer To talk on a better and tamer lot. Said she, with a frown, As she fell in the mud, "Such a saucy seesaw I never saw, sir!"—Judge.

A Hard Case.

Jones—His wife earns her own money.

Brown—Indeed! I did not know she was employed.

Jones—Oh, yes, hard at it all the time.

Brown—What does she do?

Jones—Works him to hand over.—Half-Holiday.

Not an Apt Pupil.

"I have at last come to the conclusion," remarked Miss Primleigh, "that men are not to be trusted."

"My dear," rejoined Miss DeYoung, "has it taken you all these years to discover that fact?"

And the subsequent silence couldn't have been broken with a rock crusher.—Chicago Daily News.

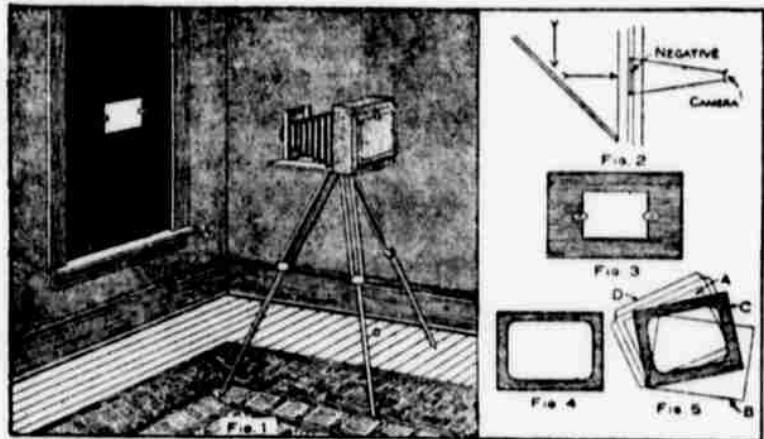
The Unknown.

Blessed ten times is the man whose nearest neighbors do not know his name nor where he lives.

HOW TO MAKE LANTERN SLIDES.

The popularity of lantern slides, and especially of the colored ones, as a means of illustrating songs, has caused so large a demand for this class of work that almost any amateur may take up slide-making at a good profit. The lantern slide is a glass plate, coated with slow and extremely fine grained emulsion. The size is 3 1/4 x 1 1/4 inches. A lantern slide is merely a print on a glass plate instead of on paper. Lantern slides can be made in two different ways. One is by contact, exactly the same as a print is made on paper, and the other by reduction in the camera. In making slides by contact, select the negative and place it

at an angle of 45 degrees on the outside of the frame to reflect the light through the negative as shown in Fig. 2. Make or secure an inside kit to place in the plate holder of your camera to hold the lantern slide plate as shown in Fig. 3. Draw lines with a pencil, outlining on the ground glass of the camera the size of the lantern slide plate, and in the place where the plate will be in the plate holder when placed in position in the camera. This will enable you to focus to the proper size. Place the camera in front of the hole in the frame, place the negative in the hole and focus the camera for the lantern slide size. Expose with



in the printing frame and put the lantern plate upon it, film to film. Clamp down the back and expose the same as for making a print.

When the negative is larger than the lantern slide plate, and it is desirable to reduce the entire view upon the slide, a little extra work will be necessary. Select a room with one window, if possible, and fit a light-proof frame into it to keep out all light with the exception of a hole in which to place the negative as shown in Fig. 1. Unless this hole is on a line with the sky it will be necessary to place a large sheet of white cardboard

a medium stop for about 20 seconds and treat the plate the same as with the contact exposure.

When dry, says Popular Mechanics, the lantern slide plate may be tinted any color by means of liquid colors.

The slide is put together by placing a mat of black paper, as shown in Fig. 4, on the gelatine side of the lantern slide, A, Fig. 5, and then a plain glass, B, over the mat, C, and the three bound together with passe-partout tape, D. Contrast negatives make the best slides, but the lantern slide plate should be made without any attempt to gain density.

THUMB TACK LIFTER.

Can Be Made from an Ordinary Sixty-Penny Nail.

This thumb tack lifter is made from an ordinary 60-penny wire nail, Fig. 1, which is about five inches long. Bend the nail as shown in Fig. 2 and flatten the point so as to make it about one-



Handy Tack Lifter.

half inch wide. Fig. 3, and grind the edge quite sharp. The head of the nail may be used for driving tacks. The bend will prevent the lifter from rolling off the drawing table.

Muslin Instead of Glass.

The use of muslin windows instead of glass in dairy construction is said to help materially in the fight against tuberculosis.